TENDER FOR Item No. 1

Equipments for Modernization of Embedded System Laboratory

FOR

Department of Electronics & Telecommunication Engineering

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Technical Specifications

Sr. No.	Proposed equipment/s	Specifications	No of units

1	Friendly ARM Mini 6410 SBC (Single-Board Computer) with 533 MHz Samsung S3C6410 ARM11 processor.
	
	Add on modules-
	GPRS Interface Modules,
	7" LCD Display,
	CMOS Camera,
	WIFI Module,
	GPS Module
		Friendly ARM Mini 6410 SBC (Single-Board Computer) with 533 MHz Samsung S3C6410 ARM11 processor.
		
		• **Dimension:** 110 x 110 mm
		• **CPU:** 533 MHz Samsung S3C6410A ARM1176JZF-S with VFP-Unit and Jazelle (max freq. 667 MHz)
		• **RAM:** 256 MB, 32 bit Bus
		• **Flash:** up to 1GB NAND Flash
		• **EEPROM:** 256 Byte (I2C)
		• **Ext. Memory:** SD-Card socket
		• **Serial Ports:** 1x DB9 connector (RS232), total: 4x serial port connectors
		• **IR:** Infrared Receiver
		• **USB:** 1x USB-A Host 1.1, 1x miniUSB Slave/OTG 2.0
		• **Audio Output:** 3.5 mm stereo jack
		• **Audio Input:** Condenser microphone
		• **Ethernet:** RJ-45 10/100M (DM9000)
		• **RTC:** Real Time Clock with battery
		• **Beeper:** PWM buzzer
		• **Camera:** 20 pin (2.0 mm) Camera interface
		• **TV Output:** AV Out
		• **LCD Interface:** 40 pin (2.0 mm) and 41 pin connector for FriendlyARM Displays and VGA Board
		• **User Inputs:** 8x push buttons and 1x A/D pot
		• **User Outputs:** 4x LEDs
		• **Expansion:** 40 pin System Bus, 30 pin GPIO, 20 pin SDIO (SD, SPI, I2C), 10 pin Buttons (2.0 mm)
		• **Debug:** 10 pin JTAG (2.0 mm)
		• **Power:** regulated 5V
		• **Power Consumption:** Mini6410: 0.25 A, Mini6410 + 7" LCD: 0.5 A
		• **OS Support**
		  ○ Windows CE 6
		  ○ Linux
		  ○ Ubuntu
		  ○ Android
			1

		With Graphics card support, CMOS Camera, USB WIFI Module, GPS Module	
2	LabVIEW Software	LabVIEW (Academic Version License) with all toolboxes	1
3	Lab VIEW FPGA Module	NI LabVIEW FPGA Hardware	1
4	Lab VIEW Digital Filter Design Hardware	NI Lab VIEW Digital Filter Design Hardware	1
5	FPGA Starter Development Kit	Cyclone II Starter Development Board Cyclone II EP2C20F484C7N device Configuration USB-BlasterTM download cable (embedded) EPCS4 serial configuration device Memory 8-Mb SDRAM 512-Kb SRAM 4-Mb flash Clocking SMA connector (external clock input) Audio 24-bit coder/decoder (CODEC) Switches and indicators Ten switches and four push buttons Four 7-segment displays Ten red and eight green LEDs Connectors VGA, RS-232, and PS/2 ports Two 40-pin expansion ports SD/MMC socket Cables/power Power from USB cable or external power supply (recommended when using the kit with accessory daughtercards, U.S.-style adapter provided) Cyclone II FPGA Starter Development Kit CD-ROM Reference designs and demonstrations targeted for the Cyclone II FPGA Starter Development Board User manual Reference guide Quartus II Web Edition CD-ROM Nios II EDS CD-ROM Nios II evaluation license included	1
6	EasyPIC Fusion v7	EasyPIC Fusion v7 with PIC32MX795F512L Kit	1
7	mikroC PRO for PIC 32 compiler	Latest Version Shall include following capabilities	1

		• full-featured *ANSI C compiler* for PIC32 devices from Microchip. • intuitive IDE, • advanced *SSA optimizations*, • hardware and software libraries,	
8	8051 development board with wooden case	RS232 Tx, Rx interface, ULN 2003 Driver, A Serial Port for ISP, An RS232 Serial Port, 7SegDisplay, RTC DS1307,ADC0804 8 LED array, LCD, Matrix Keypad,1 stepper motor, User manual, 12 DC power supply,	5
9	GoldSim (Stand Alone License) single user (Academic Version)	• Financial (FN) Module • Dashboard Authoring (DA) Module • Distributed Processing (DP) Module • Reliability (RL) Module (Learning Edition) • 1-year membership to the GoldSim Subscription Program and • 1 hour of live web-based training with a GoldSim Specialist	1
10	Wind River Software (Basic Academic Version)	Latest Version Access, visibility, and control over all boards in the embedded system, Support for following Target Architectures • Power • Intel • MIPS • ARM • M68K • SPARC • Others It shall have following Capabilities • Immediately run a simulation of popular target architectures using the built-in Quick Start Platform. • Analyze a full system, not just a single board. • Debug efficiently by running the simulation forward or in reverse. • Resume execution from the exact point at which you last saved it. • Share system state, execution history, and virtual hardware setups with anyone, anywhere. • Inject faults to test system robustness. • Automate manual steps and repetitive tasks with full scripting capability. • Use the Simics built-in, Eclispse-based, C/C++ source code debugger	--
11	VISSim	Latest version,	--

		Including modeling, simulation and control system design applications.	
12	DSK 6713	DSK TMS320C6713 DSP onboard including full-speed verification of code with Code Composer Studio. USB Interface, SDRAM and ROM An analog interface circuit for Data conversion (AIC), An I/O port, Embedded JTAG emulation support	--
13	ProEmulator (Academic Version)	ProEmulator Embedded system emulator architecture, common support to emulate various types of micro-processors & devices on an x86 PC (Windows). PEMU plus GUI. Windows OS compatible with Win32 SDK.	--

Schedule B

Sr. No.	Name of the equipment/s	Qty	Rate
1	FriendlyARM Mini 6410 SBC (Single-Board Computer) with 533 MHz Samsung S3C6410 ARM11 processor. Add on modules- GPRS Interface Modules, 7" LCD Display, CMOS Camera, WIFI Module, GPS Module	1	
2	LabVIEW Softwre	1	
3	Lab VIEW FPGA Module	1	
4	Lab VIEW Digital Filter Design Toolkit	1	
5	FPGA Starter Development Kit	1	
6	EasyPIC Fusion v7	1	
7	mikroC PRO for PIC 32 compiler	1	
8	8051 development board with wooden case	5	
9	GoldSim (Stand Alone License) single user (Academic Version)	1	
10	Wind River Software (Basic Academic Version)	1	
11	VISSim	1	

Seal & Signature of Supplier

NOTE:

01. The Rates quoted must be in accordance with detailed technical specifications.
02. The rates quoted are inclusive of all taxes, packing and forwarding charges and freight charges etc.